

## REMARKS

Claims 32-51 were pending in the application prior to this amendment. By this amendment, all previous claims have been cancelled and replaced with new claims 32-53 set forth above. The newly amended claims have been drafted in a manner that Applicants believe avoids the recapture rule, as will be discussed below.

### **I. NEWLY AMENDED CLAIMS.**

The claims as now amended are substantially identical to the claims previously submitted, except as will be discussed immediately below. Newly submitted claims 32-53 relate to the previously filed claims as follows:

<u>New</u>	<u>Previous</u>
32	32
33	n/a
34	35
35	36,37
36	38
37	39
38	40
39	41
40	48
41	50
42	46
43	42
44	43
45	44
46	40
47	46
48	n/a
49	45,40
50	46
51	48
52	50
53	n/a

Independent claims 32, 43 and 49 are substantially identical to previously submitted claims 32, 42 and 45, respectively, except that they have been amended to further recite that the fibrous material has “a fiber length less than about 25 mm”. Support for this limitation is found in the reissue application at col. 7, *l.* 4 (fiber length may be “up to about 25 mm”); col. 44, *ll.* 27-28 (preferred fiber length “greater than about 1.5 mm, and more preferably . . . up to about 25 mm”); and col. 44, *ll.* 43-44 (“shorter fibers of less than about 1.5 mm can also be used” but are “less preferred”). Support for new claims 33, 48 and 53 is also found at col. 44, *ll.* 43-44.

The remaining claims are based on previously submitted claims for which support has already been shown.

## **II. STATUS OF APPLICATION.**

The Office Action states that all but one of the recapture rejections under 35 U.S.C. § 251 have been withdrawn, as have all rejections relating to patentability under 35 U.S.C. § 112, ¶ 2, and 35 U.S.C. § 103. The only remaining rejections in the Office Action are (1) the recapture rejection based on the fact that “[t]he newly amended claims do not contain the limitation that the fibrous material has an average fiber length of greater than about 2 mm” (hereinafter the “subject fiber-length limitation”) and (2) an obviousness-type double patenting rejection.

The Office Action requests Applicants to submit original U.S. Patent No. 5,662,731 as well as a list of references cited during prosecution of the original and reissue applications. Accordingly, Applicants are submitting concurrently herewith the original Red Ribbon patent as well as a list of all requested references on form PTO-1449. In response to the obviousness-type double patenting rejecting, Applicants also submit herewith a Terminal Disclaimer.

### III. REJECTION UNDER 35 U.S.C. § 251.

#### A. The Office Action.

The Office Action rejects previous reissue claims 32-51 under 35 U.S.C. § 251 on the grounds they constitute “an improper recapture of claimed subject matter deliberately cancelled in the application for the patent upon which the present reissue is based” (page 2) (emphasis added). The Office Action further states

The newly amended claims do not contain the limitation that the fibrous material has an average fiber length of greater than about 2 mm. It is noted that this limitation was relied on by the applicants in the original prosecution to distinguish over Tiefenbacher et al.

*Id.* Even though previous reissue claims 32-51 clearly contained material limitations not contained in any claim that existed during the pendency of the application for the patent upon which the present reissue is based (hereinafter “original application”), the Office Action nevertheless relies on the recapture rule in Ball Corp. v. United States, 221 USPQ 289, 295 (Fed. Cir. 1984), which “bars the patentee from acquiring, through reissue, claims that are of the same or broader scope than those claims that were cancelled from the original application” (emphasis added).

First, the fact that the Examiner has removed all prior art rejections is proof that the Examiner recognizes that previous claims 32-51 contain material limitations not found in any claims that existed, but were not allowed, during prosecution of the original application, notwithstanding the removal of the subject fiber-length limitation. Second, the Office Action has not provided an example of a single reissue claim that is “of the same or broader scope than [any single] claim[] that [was] cancelled from the original application” or that was ever pending but not allowed. In fact, previous reissue claims 32-51 are clearly narrower in scope than any of the claims that were actually cancelled or not allowed in the original application. Based only on the rule articulated in Ball,

previous claims 31-52 are proper for reissue because they are clearly not “of the same or broader scope than those claims that were cancelled from the original application” (emphasis added).

The Office Action further relies on Mentor Corp v. Coloplast, Inc., 998 F.2d 992, 994 (Fed. Cir. 1993); In re Clement, 131 F.3d 1464, 1469 (Fed. Cir. 1997); and Hester Industries, Inc. v. Stein, Inc., 142 F.3d 1482 (Fed. Cir. 1998). However, the Office Action has mischaracterized these cases by taking the unduly narrow position that a reissue applicant may never broaden a limitation added, argued or otherwise relied upon for patentability of a claim, even if the claim is otherwise materially narrowed in another respect. A review of the applicable case law, including those cited by the Office Action, clearly indicates that broadened reissue claims may avoid the recapture rule, even if broadened with respect to a claim limitation that was relied upon for patentability, so long as they are “materially narrowed in other respects”. Hester, 142 F.3d at 1482 (citing Mentor and Clement). In each of the cited cases where the Federal Circuit applied the recapture rule to invalidate reissue claims (*e.g.*, Hester, Mentor, and Clement), the claims were not materially narrowed, *i.e.*, they were only insignificantly narrowed.

**B. A Review of the Applicable Case Law Indicates There is an Exception to the Recapture Rule that Applies in the Present Case.**

Of the cases cited in the Office Action, Hester is clearly the most applicable because it specifically dealt with claims that were broadened during reissue to remove a limitation that was not added during original prosecution, but merely argued as being important for patentability. Therefore, Hester is the only reissue case that is directly “on point” and is the decision that most closely bears on the facts of the present reissue application, in which the only broadening aspect of the reissue claims involves the removal of a limitation that was never added by amendment but merely argued (*i.e.*, the “fiber length greater than about 2 mm” limitation).

The court in Hester held that “[a]rguments made to overcome prior art can equally evidence an admission sufficient to give rise to a finding of surrender.” Hester, 142 F.3d at 1481. “Logically, this is true even when the arguments are made in the absence of any claim amendment.” Id. “Amendment of a claim is not the only permissible predicate for establishing a surrender.” Id. “Thus, we conclude that, in a proper case, a surrender can occur through arguments alone.” Id. at 1482 (emphasis added). Thus, Hester clearly holds that arguments alone, even in the absence of a specific claim amendment, “can” result in a surrender under the recapture rule. However, Hester does not hold that surrender by argument will “always” or “in every case” result in surrender under the recapture rule, only that they “can”.

Even after the court in Hester “concluded that there ha[d] been a surrender” because the “surrendered subject matter ha[d] crept back into the . . . reissue claims,” the analysis did not end there. Id. Instead, the court further stated that “because the recapture rule may be avoided in some circumstances, we consider whether the reissue claims were materially narrowed in other respects” notwithstanding the earlier finding that the “surrendered subject matter has crept back into the . . . reissue claims”. Id. (citing Mentor and Clement). “For example, in Ball the recapture rule was avoided because the reissue claims were sufficiently narrowed (described by the court as ‘fundamental narrowness’) despite the broadened aspects of the claims.” Id. (emphasis added).

In the context of a surrender by way of argument, this principle, in appropriate cases, may operate to overcome the recapture rule when the reissue claims are materially narrower in other overlooked aspects of the invention. The purpose of this exception to the recapture rule is to allow the patentee to obtain through reissue a scope of protection to which he is rightfully entitled for such overlooked aspects.

Id. at 1482-83 (emphasis added). Thus, the Federal Circuit, in Hester, clearly articulated what it characterized as an “exception to the recapture rule” that exists “[i]n the context of a surrender by way of argument” that “may operate to overcome the recapture rule” in some cases (*i.e.*, even in

cases where the recapture rule would otherwise apply because the “surrendered subject matter has crept back into the . . . reissue claims”). Id.

In Hester, the recapture rule was triggered due to the removal in reissue of limitations that were not added to the claims during original prosecution of the patent, but merely argued as being “critical” and “very material” to patentability. Id. at 1482. In particular, the limitations that were argued during original prosecution of the patent but removed during reissue were the “‘solely with steam’ and ‘two sources of steam’ limitations”. Id. The recapture rule was triggered because applicant “repeatedly argued that the ‘solely with steam’ and ‘two sources of steam’ limitations distinguished the original claims from the prior art.” Id. Indeed, the court found that “[t]hese were [applicant’s] primary bases for distinguishing the broadest claim . . . from the prior art.” Id. “At no less than 27 places in six papers submitted to the Patent Office, [applicant] asserted that the ‘solely with steam’ limitation distinguished the claimed invention from the prior art, and [applicant] did the same with respect to the ‘two sources of steam’ limitation at no less than 15 places in at least five papers.” Id. “[Applicant] argued that each of these limitations was ‘critical’ with regard to patentability” and that, as a result of “repeated prosecution arguments, [applicant] surrendered claim scope that does not include these limitations.” Id.

Notwithstanding the initial finding that “surrender” presumptively occurred as a result of vigorous argumentation by applicant regarding the removed limitations, the court in Hester thereafter articulated the above-quoted “exception to the recapture rule” that “in appropriate cases, may operate to overcome the recapture rule when the reissue claims are materially narrower in other overlooked aspects of the invention” so as “to allow the patentee to obtain through reissue a scope of protection to which he is rightfully entitled for such overlooked aspects.” Id. at 1482-83 (emphasis added). In fact, when determining whether to apply this “exception to the recapture rule”, the court looked at other limitations that were added to the claims during reissue to determine if they resulted in claims

that were “materially narrower in other overlooked aspects of the invention”, namely, the “high humidity steam” and “spiral conveyance path” limitations. Id. at 1483. By doing so, the court in Hester clearly indicated that a patentee may, in fact, remove or broaden a limitation during reissue that was argued as being “critical” and “very material” to patentability during prosecution, so long as “the reissue claims are materially narrower in other overlooked aspects of the invention.” Id. at 1482-83.

If, as the present Office Action asserts, a patentee may never remove a limitation argued to be important to patentability during prosecution (*i.e.*, a “per se rule”), the court in Hester would simply have concluded its analysis after determining that the “solely with steam” and “two sources of steam” limitations had been removed from the reissue claims. However, the court did not apply the per se rule advanced in the present Office Action, but continued to analyze the claims with respect to the “high humidity steam” and “spiral conveyance path” limitations to see if these additional limitations were sufficient to avoid the recapture rule under the well-established “exception to the recapture rule”. Id. at 1483. Thus, the court in Hester clearly recognized that reissue claims can, in fact, avoid the recapture rule if they “are materially narrower in other overlooked aspects of the invention”, even if the reissue claims were amended to remove limitations argued by the patentee as being “critical” and “very material” to patentability during prosecution of the original patent so as to evidence a surrender under the recapture rule.

When determining whether the “high humidity steam” and “spiral conveyance path” limitations added during reissue “materially narrowed” the reissue claims so as to avoid the recapture rule, the court found that the “exception to the recapture rule” did not apply because “[t]he asserted claims [were] not materially narrower, despite [patentee’s] claims to the contrary.” Id. at 1483. Rather than materially narrowing the reissue claims, the court found that “the term ‘high humidity steam’ is actually the same as or broader than the limitation [*i.e.*, ‘at near 100% humidity 100° C and

a pressure above atmospheric]. . . that this term replaced.” Id. The court made a similar finding that “[t]he term ‘spiral conveyance path’ is also not materially limiting” compared to the limitation which it replaced, namely the “‘means passing said conveyor belt through said housing’” limitation: Id. Accordingly, the court in Hester concluded that “[i]n sum, neither alone nor together do the terms ‘high humidity steam’ and ‘spiral conveyance path’ materially narrow the claims.” Id. The court also found that “the ‘spiral conveyance path’ and ‘high humidity steam’ limitations are not aspects of the invention that were overlooked during prosecution of the original patent” since these aspects of the invention were included within original claim 1, but simply recited using different terminology. Id. The obvious corollary is that had the patentee in Hester presented “reissue claims [that were] materially narrower in other overlooked aspects of the invention”, the recapture rule would have been avoided.

In short, because the “spiral conveyance path” and “high humidity steam” limitations did not serve to materially narrow the reissue claims, the court concluded that “this is not a case which involves the addition of material limitations that overcome the recapture rule.” Id. The court also concluded that “[t]he realm of corrections contemplated within § 251 does not include recapturing surrendered subject matter, without the addition of materially-narrowing limitations”, thereby clearly holding that 35 U.S.C. § 251 does, in fact, contemplate the “recaptur[e] of surrendered subject matter” so long as the reissue claims further include “materially-narrowing limitations”. Id. at 1483-84 (emphasis added).

The “exception to the recapture rule” articulated in Hester was formally included as the third element of a three-part test recently set forth in Pannu v. Storz Instruments, Inc., 258 F.3d 1366 (Fed. Cir. 2001):

Application of the recapture rule is a three-step process. The first step is to “determine whether and in what ‘aspect’ the reissue claims are broader than the



patent claims.” [Citation omitted.] “The second step is to determine whether the broader aspects of the reissued claim related to surrendered subject matter.” [Citation omitted.] Finally, the court must determine whether the reissued claims were materially narrowed in other respects to avoid the recapture rule. [Citation omitted.]

Pannu, 258 F.3d at 1371 (citing Mentor, Hester and Clement) (emphasis added). Thus, the Federal Circuit clearly recognizes that, even in the case where a reissue claim includes “broader aspects” that “relate[] to surrendered subject matter”, the reissue claim can still “avoid the recapture rule” if it is “materially narrowed in other respects”. Id. As in Hester, the court in Pannu found that the “exception to the recapture rule” was inapplicable under the facts of the case, although it indisputably recognized and reiterated that such an exception exists. Like Mentor and Clement, Pannu involved reissue claims that sought to broaden or eliminate a claim limitation that was added during original prosecution of the patent to obtain allowance of the application, rather than a limitation that was merely argued, as in Hester.

In short, both Hester and Pannu clearly recognize an “exception to the recapture rule” that operates as part 3 of a three-part test to avoid the recapture rule, even if the reissue claims are broadened in a manner “related to surrendered subject matter”. If, as is asserted in the Office Action, a reissue claim may never be broadened relative to a claim limitation that was added and/or argued to obtain allowance of the original patent, there would be no “exception to the recapture rule”. Instead, the recapture rule would be a “per se” rule, and there would be no third element of the three-part test articulated in Pannu and recognized by Hester. Instead, the inquiry would simply end after the second step of the three-part test once a court found that the reissue claims included “broader aspects. . . related to surrendered subject matter”, which is precisely how the Office Action has applied the recapture rule in the present case.

C. **The Office Action Has Collapsed the Three-Part Test for Avoidance of the Recapture Rule into a Two-Part Test that Eliminates Part 3, and by So Doing Fails to State Sufficient Grounds for a Finding that Previous Reissue Claims 31-52 Improperly Recaptured Surrendered Subject Matter.**

In the present reissue application, the Office Action has applied parts 1 and 2 of the three-part recapture rule test and found that (1) previous reissue claims 32-51 are broader in some respects compared to the issued claims and (2) that they are broader in an aspect “related to surrendered subject matter” because they do not include a limitation that was argued during prosecution of the original patent as distinguishing over the prior art (*i.e.*, the “greater than about 2 mm” limitation). The Office Action has, however, completely ignored part 3 of the three-part test relating to the recapture rule by failing to consider whether previous reissue claims 32-51 “were materially narrowed in other respects in order to avoid the recapture rule”. Pannu, 258 F.3d at 1371; *see* Hester, 142 F.3d at 1482-83. By asserting that the reissue claims must include the “greater than about 2 mm” limitation, the Office Action has, in essence, argued that the only way to satisfy part 3 of the three-part test is to also satisfy part 2 of the test, thus collapsing parts 2 and 3 together as a single element. This is clearly contrary to the recapture rule and its associated exception, as plainly stated in both Hester and Pannu.

In view of the foregoing, the Office Action has plainly failed to articulate grounds sufficient to reject previous reissue claims 32-51 under 35 U.S.C. § 251 as improperly recapturing subject matter that was surrendered during prosecution of the original patent. Moreover, following the recapture rule articulated by Pannu and Hester, which summarize the decisions of Mentor, Ball and Clement, it is clear that previous reissue claims 32-51 were proper for reissue because they “were materially narrowed in other respects in order to avoid the recapture rule”. In particular, previous independent reissue claims 32, 42 and 45 were “materially narrowed” to avoid the recapture rule relative to the issued claims because they variously included “coating composition”, “laminating

composition” and “biodegradable material” limitations, respectively, which are not found in the issued claims. Moreover, these limitations are clearly directed to “overlooked aspects of the invention” (*i.e.*, they were not included in any claim at any time during the prosecution of the original patent). See Hester, 142 F.3d at 1483. Thus, previous reissue claims 32-51 were clearly proper for reissue under 35 U.S.C. § 251.

**D. Previous Reissue Claims 32-51 were Proper for Reissue, Even Though They Eliminated the “Greater than About 2 mm” Limitation, Because They “Were Materially Narrowed in Other Respects to Avoid the Recapture Rule”.**

Previous reissue claims 32-51 did not seek to *impermissibly* recapture subject matter surrendered to overcome the prior art. Instead, they “were materially narrowed in other respects in order to avoid the recapture rule”. Pannu, 258 F.3d at 1371; Hester, 142 F.3d at 1482-83. Because of this, they do not cover or relate to subject matter that was surrendered during prosecution in order to secure patentability of the original patent.

The Office Action takes the position that previous reissue claims 32-51 are impermissible under 35 U.S.C. § 251 because they do not include the “greater than about 2 mm” limitation (page 2). In support of this position, the Office Action identifies statements made by Applicants during prosecution of the original patent that the “greater than about 2 mm” limitation was relied on for patentability of the claims. Applicants have never disputed this, and do not now dispute this. What Applicants dispute is that the Office Action has only focused on part 2 of the three-part test for the recapture rule, while completely ignoring part 3, which identifies an “exception to the recapture rule” in the event “the reissue claims are materially narrower in other overlooked aspects of the invention”. Hester, 142 F.3d at 1482-83; see Pannu, 258 at 1371. The Office Action has refused to even address the issue as to whether previous reissue claims 32-51 were “materially narrowed in other respects to avoid the recapture rule” according to part 3 of the three-part test.

By way of review, previous reissue claims 32, 42 and 45 included the following limitations not found in any issued claim, or in any claim that was ever pending during prosecution, of the original patent:

Previous Claim 32

forming the second region of the starch-based composite composition by positioning a coating composition that is resistant to moisture adjacent to the first region, wherein the coating composition includes at least one of an edible oil, a drying oil, melamine, an epoxy resin, a terpene resin, polyvinyl chloride, polyvinyl alcohol, polyvinyl acetate, a polyacrylate, hydroxypropylmethylcellulose, methocel, polyethylene glycol, an acrylic, an acrylic copolymer, polyurethane, polylactic acid, polyhydroxybutyrate-hydroxyvalerate copolymer, soybean protein, or a wax.

Previous Claim 42

forming the second region of the starch-based composite composition by positioning a substantially solid laminating composition that is resistant to moisture adjacent to the first region after the starch-based binder has become at least partially solidified.

Previous Claim 45

forming the second region of the starch-based composite composition by positioning a biodegradable material adjacent to the first region, the biodegradable material being at least one of a biodegradable polyester resin, polyvinyl alcohol, polyvinyl acetate, polylactic acid, or a polyhydroxybutyrate-hydroxyvalerate copolymer.

The foregoing limitations are both “narrowing” and “material” because they distinguish the claims over the same art that was distinguished by the “greater than about 2 mm” fiber length limitation. Indeed, the Office Action acknowledges that previous reissue claims 32-51 are patentable over the prior art of record, including the same reference (*i.e.*, WO 91/12186) that was previously distinguished during prosecution of the original patent by the “greater than about 2 mm” limitation. The foregoing limitations constitute the “overlooked aspects of the invention” that were included in the reissue claims to avoid the recapture rule, as provided for by the “exception to the recapture rule” articulated in Hester and identified as part 3 of the three-part test set forth in Pannu.

Accordingly, because previous “reissue claims [32-51] are materially narrower in other overlooked aspects of the invention”, they clearly do not seek to recapture surrendered subject matter. For this reason, Applicants believe that previous reissue claims 32-51 were proper for reissue under 35 U.S.C. § 251.

**E. Present Reissue Claims 32-53 Do Not Impermissibly Recapture Surrendered Subject Matter, Even Though They Eliminate the “Greater than About 2 mm” Limitation, Because They “Are Materially Narrower in Other Overlooked Aspects of the Invention” Compared to the Claims of the Original Patent.**

Present reissue claims 32-53 are similar to previous reissue claims 32-53 and are proper for reissue for at least the same reasons given above with respect to previous reissue claims 32-51. In particular, present independent reissue claims 32, 43 and 49 include substantially the same materially narrowing limitations as previous independent reissue claims 32, 42 and 45, respectively.

Moreover, each of present independent reissue claims 32, 43 and 49 further includes the aforementioned “fibrous material having a fiber length less than about 25 mm” limitation. Thus, present reissue claims 32-53 are further materially narrowed in this respect compared to previous reissue claims 32-51, as well as the claims of the original patent, which claimed any “fibrous material having an average fiber length greater than about 2 mm”. Thus, whereas the present reissue claims are broader in some respects compared to the claims of the original patent in that they are not limited to a “fibrous material having an average fiber length greater than about 2 mm”, but may include shorter fibers, they are also “materially narrower” in that the claims require the inclusion of a “fibrous material having a fiber length less than about 25 mm”. Thus, whereas the claims of the original patent could be infringed by exclusively using fibers that were longer than “about 25 mm”, the present reissue claims require that at least some of the fibers have a length that is “less than about

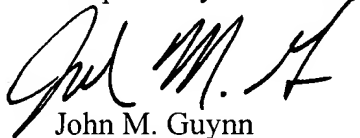
25 mm”<sup>1</sup>. Thus, the present reissue claims are “materially narrower” than the claims of the original patent for this additional reason, thereby further showing that such claims avoid the recapture rule as articulated in the applicable case law.

### III. CONCLUSIONS.

In view of the arguments set forth above, Applicants believe the reissue claims are appropriate for reissue and do not constitute inappropriate recapture of cancelled or surrendered subject matter. In the event that the Examiner finds any remaining impediment to the prompt allowance of this application, which could be clarified by a telephonic interview, or which is susceptible to being overcome by means of an Examiner’s Amendment, the Examiner is respectfully requested to initiate the same with the undersigned attorney.

Dated this 9<sup>th</sup> day of October 2001.

Respectfully submitted,



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<sup>1</sup> Like the “greater than about 2 mm” limitation, the “less than about 25 mm” limitation directly relates to the “fiber length” of the claimed “fibrous materials”. Cf. Pannu, 258 F.3d at 1372.